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The Patent Office  
Concept House  
Cardiff Road  
Newport  
South Wales  
NP10 8QQ

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

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Signed 

Dated 15 May 2001

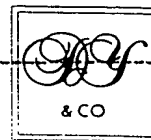
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# Patents Form 1/77

Patents Act 1977  
(Rule 16)

The  
**Patent  
Office**

10MAY99 E445765-25 D02246  
P01/7700 0.00 - 9910679.1



**9910679.1**

- 7 MAY 1999



## Request for a grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road  
Newport  
Gwent NP9 1RH

1.	Your reference	P/6834.GB		
2.	Patent application number (The Patent Office will fill in this part)			
3.	Full name, address and postcode of the or of each applicant (underline all surnames)	Argo Interactive Limited 7 Dukes Court Chichester West Sussex PO19 2FX		
	Patents ADP number (if you know it)			
	If the applicant is a corporate body, give the country/state of its incorporation	United Kingdom 07606 734001		
4.	Title of the invention	Data Processing Apparatus		
5.	Name of your agent (if you have one)	D YOUNG & CO		
	"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)	21 NEW FETTER LANE LONDON EC4A 1DA		
	Patents ADP number (if you have one)	59006 ✓		
6.	If you are declaring priority from one or more earlier patent applications, give the country and date of filing of the or each of these earlier applications and (if you know it) the or each application number	Country	Priority application number (if you know it)	Date of filing (day/month/year)
7.	If this application is divided or otherwise derived from an earlier UK application, give the number and filing date of the earlier application	Number of earlier application	Date of filing (day/month/year)	

8. Is a statement of inventorship of right to grant of a patent required in support of this request? (Answer 'Yes' if:  
a) any applicant named in part 3 is not an inventor, or  
b) there is an inventor who is not named as an applicant, or  
c) any named applicant is a corporate body.  
See note (d))

Yes

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form 0

Description 2

Claims(s) 0

Abstract 0

Drawing(s) 0

10. If you are also filing any of the following, state how many against each item.

Priority documents 0

Translations of priority documents 0

Statement of inventorship and right to grant of a patent (Patents Form 7/77) 0

Request for preliminary examination and search (Patents Form 9/77) 0

Request for substantive examination (Patents Form 10/77) 0

Any other documents (please specify)

Additional Document - Copy of separate Patent Application Our Ref: P/6837.GB

11. I/We request the grant of a patent on the basis of this application.

Signature

Date

D Young & Co

D YOUNG & CO

Agents for the Applicants

07 May 1999

12. Name and daytime telephone number of the person to contact in the United Kingdom

N A J Robinson

01703 634816

### Warning

After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.

### Notes

a) If you need help to fill in this form or you have any questions, please contact the Patent Office on 01645 500505

b) Write your answers in capital letters using black ink or you may type them

c) If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.

d) If you answered 'Yes' Patents Form 7/77 will need to be filed.

e) Once you have filled in the form you must remember to sign and date it.

f) For details of the fee and ways to pay please contact the Patent Office.

**ADDITIONAL DOCUMENT - NEW PATENT APPLICATION OUR REF: P/6837.GB**

**FILED IN CONNECTION WITH**

**OUR REF: P/6834.GB**

A System to Allocate Graphical Icons in Hypertext Documents  
Provisional Patent Application

P6834.4B

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England

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A system to Allocate Graphical Icons in Hypertext Documents

*This patent application document should be referenced with the provisional patent application titled "A system to Categorise Links within a Hypertext Document"*

**Overview:**

A majority of information currently available in HTML and other mark-up languages has been designed for display on a Desktop Computer Monitor of a typical resolution of 640 by 480 or 1024 by 768 pixels. A typical small screen device only has a resolution of 120 by 90. This system has been designed to re-process the original document into a format that will be easier to interpret and understand on a small screen device.

This system has been designed for the purposes of converting information published in a hypertext mark-up language, to a format more suitable for small screen device. In a typical installation, the hypertext language would be HTML and the destination device would be PDA (Personal Digital Assistant) or Mobile phone.

The system can be used on any mark-up language and work both locally as well as across a network.

**Problem:**

When viewing a hypertext document, it is often difficult to isolate particular hypertext links as they may be buried within long textual lists of other links. Long lists of hypertext links can be difficult to read and understand so representing this information in a different way would improve the quality of the document.

When displaying the document on a computing device with a small screen, such as a Personal Digital Assistant (PDA), adding text to a link would not improve matters as there is insufficient space available.

**Solution:**

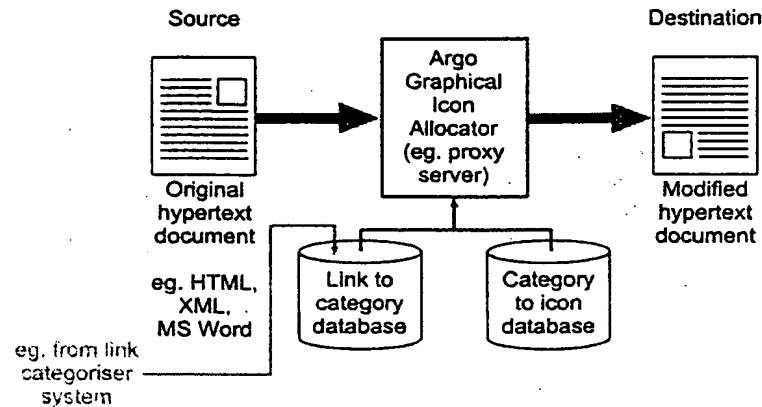
Argo proposes a system of computer software, through which users are required to fetch hypertext documents that they wish to read. Typically this is in the form of an intermediate 'proxy server' but a stand-alone mode of operation can also be envisaged. The system processes the hypertext pages as they are transferred from the storage location to the reader. After identifying the location of links to other hypertext pages, it would normally analyse them with the System to Categorise Links (described in a separate patent application), although other sources of category information can be envisaged.

*our ref P/6837.4B filed today*

A graphical icon would be selected depending on the category or subject of the link and its associated text, and inserted into the document beside (or replacing) the link. A 'category' could be any word or phrase that identifies the topic of the document being targeted by a link. This may originate from a keyword-matching system, or from an examination of the contents of the page to which the link is addressed.



As shown in the first diagram, the hypertext document is passed through our system before delivery to the reader. Our system uses hypertext link categorisation information (either from data from within the document or from another system) to determine the category of the link, and then selects an appropriate graphical icon for that category.



The diagrams below show an example of an unmodified hypertext document on the left, and the version with automatically allocated graphics inserted, on the right.

Look at:  
Today's weather  
Your home page  
Local travel information  
Copyright notice

Look at:  
Today's weather  
Your home page  
Local travel information  
Copyright notice

As demonstrated in the example, the additional graphical information makes the document easier to read and faster interpret. This is particularly useful when reading documents on a small screen device such as a mobile phone, or when reading large documents with many links.

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